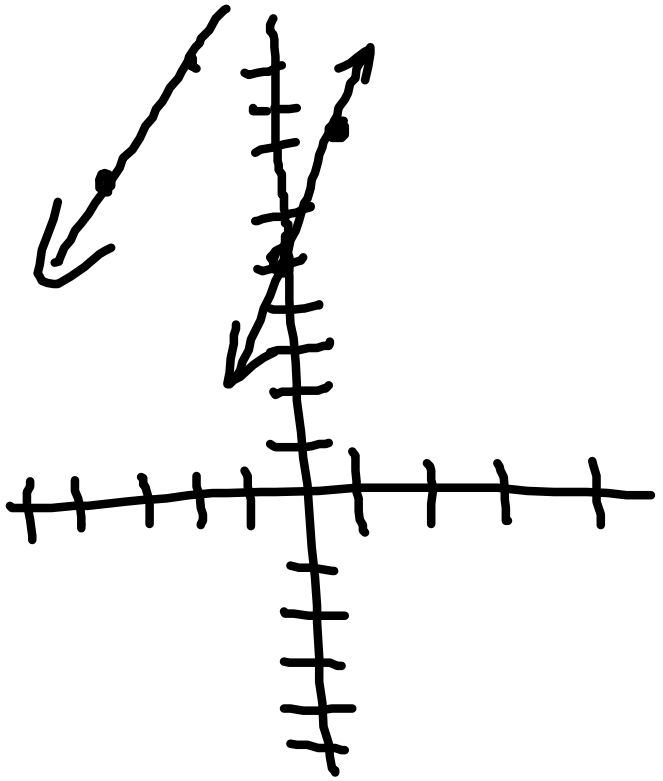
(37)

$f(x) = 2x + 5$

$g(x) = 2(x+3) + 5 + 2$

$g(x) = 2x + 6 + 7$

$g(x) = 2x + 13$



$f(x) = 3 - x$

$f(x) = -x + 3$

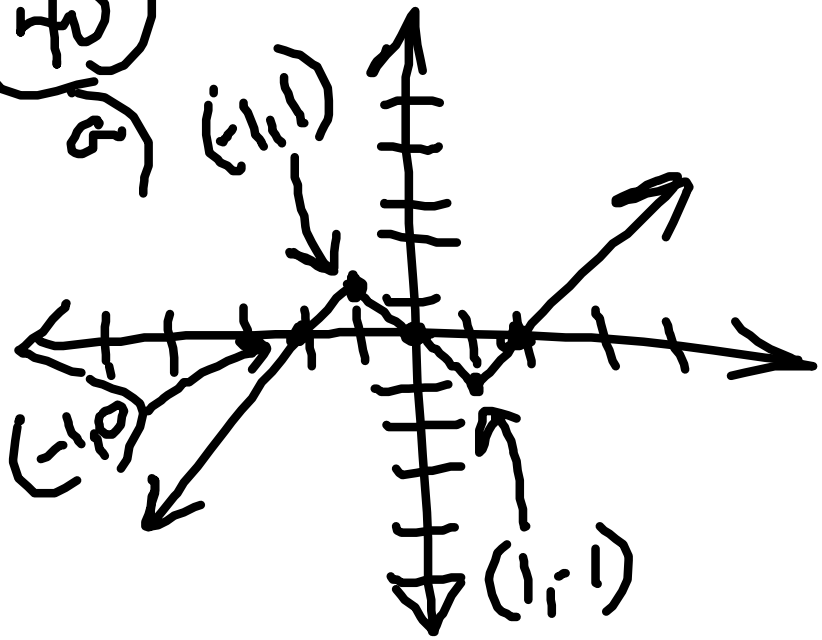
$g(x) = -(x - 3) + 3 - 2$

$g(x) = -x + 3 + 3 - 2$

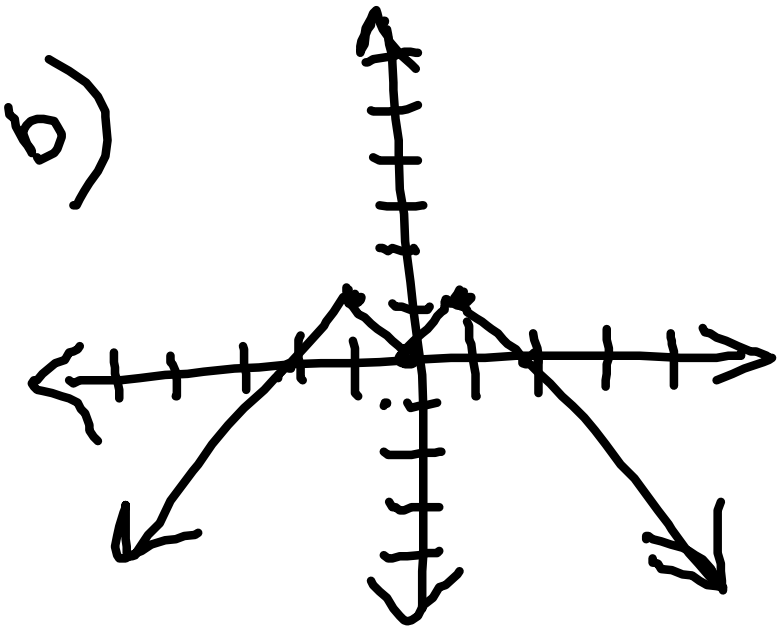
$g(x) = -x + 4$

40

a)

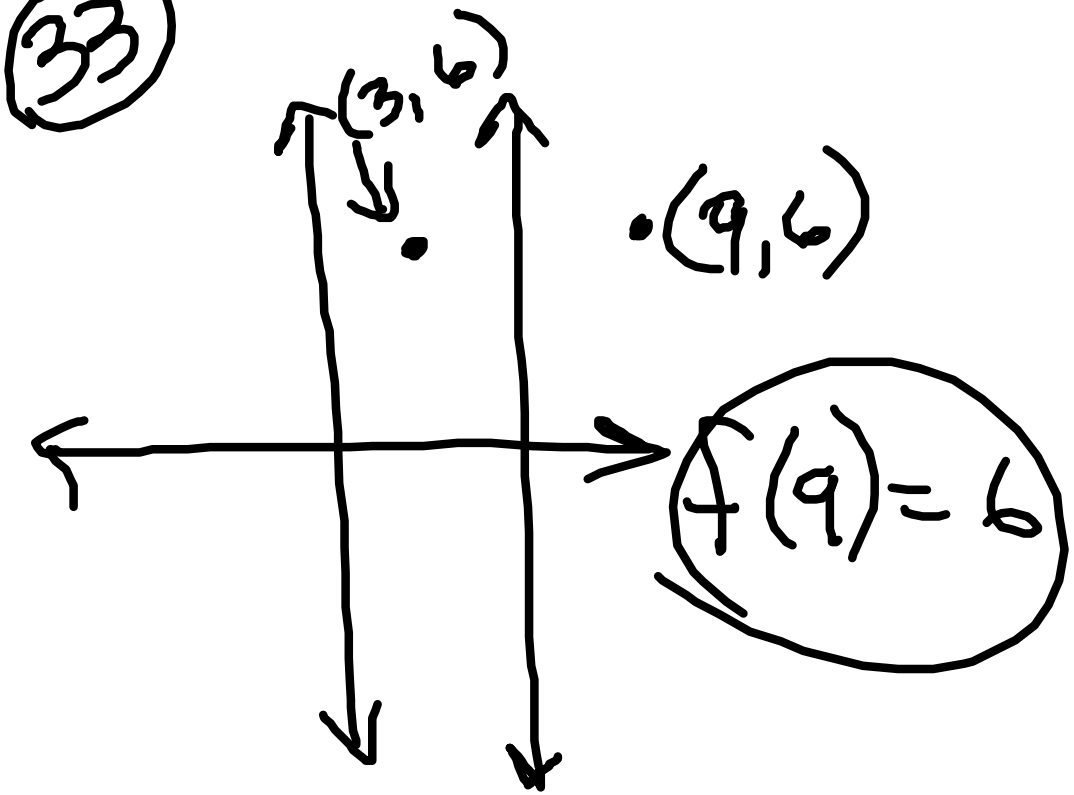


b)



$f(3)=6$ $(3,6)$

(33)



over y

$y=f(-x)$

over x

$y=-f(x)$

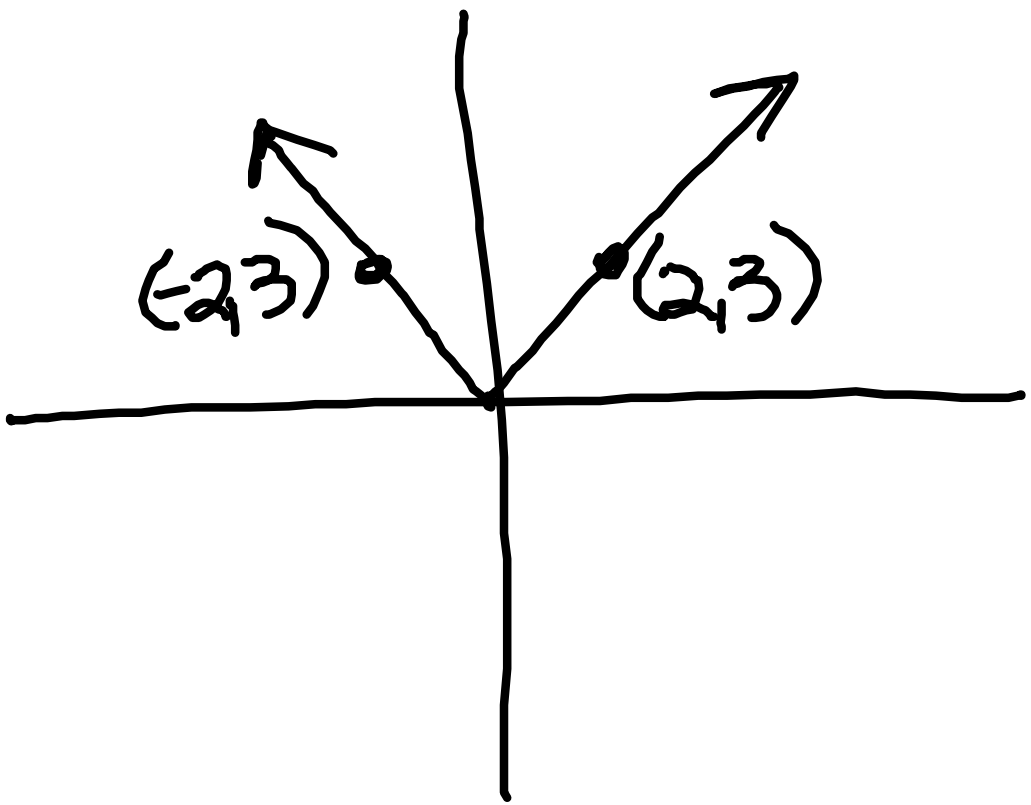
over y

$y = f(-x)$

over x

$y = -f(x)$

$y = f(x)$



$$f(x)=\frac{3}{x^2+5x-6}$$

$$x^2+5x-6\neq 0$$

$$(x+6)(x-1)\neq 0$$

$$x\neq -6 \quad x\neq 1$$

$D: (-\infty,-6)\cup(-6,1)\cup(1,\infty)$

$X: (-\infty,-6)\cup(-6,1)\cup(1,\infty)$

$x+\frac{5}{2}: (-\infty,-\frac{7}{2})\cup(-\frac{7}{2},+\frac{7}{2})\cup(\frac{7}{2},\infty)$

$(x+\frac{5}{2})^2 \quad [0,\frac{49}{4})\cup(\frac{49}{4},\infty)$

$(x+\frac{5}{2})^2-\frac{49}{4} \quad [-\frac{49}{4},0)\cup(0,\infty)$

$$f(x)=\frac{3}{x^2+5x-6}$$

$$f(x)=\frac{3}{(x+\frac{5}{2})^2-\frac{49}{4}}$$

$\frac{1}{(x+\frac{5}{2})^2-\frac{49}{4}} \quad (\infty,-\frac{4}{49}]\cup(0,\infty)$